National Skin Cancer Prevention Education Program

At-A-Glance

1996

"Skin cancer now appears to be as common as all other types of cancer combined."

Martin A. Weinstock MD, PhD, Director, Dermatoepidemiology Unit,
Veterans Affairs Medical Center, Roger Williams Medical Center, and Brown University

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Skin Cancer

Skin cancer is the most common and most rapidly increasing form of cancer in the United States. One in six Americans will develop skin cancer. The three major types of skin cancer are basal cell carcinoma, squamous cell carcinoma, and the more serious malignant melanoma. An estimated one million new cases of basal and squamous cell carcinomas occur each year; it is estimated that 38,300 new cases of melanoma will occur in 1996.

Skin cancers will claim the lives of approximately 9,430 people in 1996: 7,300 of these deaths will be from melanoma, and 2,130 will be from other skin cancers.

If detected and treated early, basal cell carcinoma has a cure rate of greater than 95 percent. Untreated, this cancer can cause considerable damage and disfigurement by spreading to underlying structures, although it usually does not spread through the bloodstream like other cancers. Basal cell carcinoma is usually a slow-growing, translucent, pearly raised area that may crust, ulcerate, and bleed. It is found mostly on the face, neck, hands, and trunk.

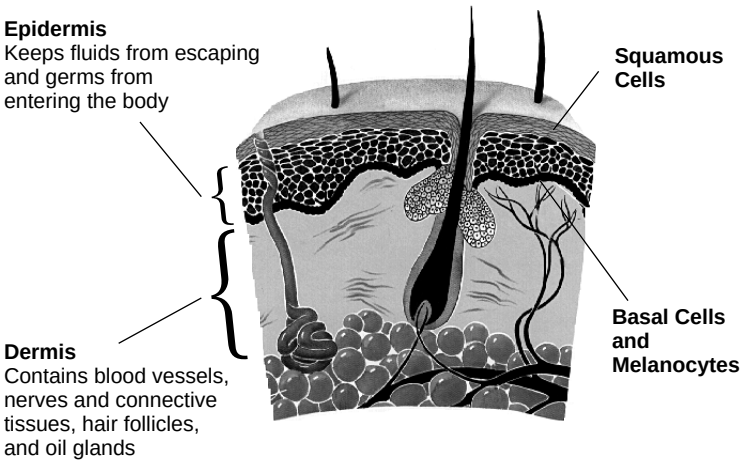
Squamous cell carcinoma is also 95 percent curable if detected and treated early. This tumor is a raised, red or pink, scaly nodule. It typically appears on the face, hands, or ears, but it can grow in size and spread to other parts of the body. Squamous cell carcinoma is two to three times more common in men than in women.

Basal cell and squamous cell carcinomas, often referred to as nonmelanoma skin cancer, can lead to substantial morbidity, but mortality rates are low. Although nonmelanoma skin cancers occur more frequently than melanoma, melanoma causes more than 75 percent of all deaths from skin cancer.

Malignant melanoma usually begins as a mottled, light brown blemish or a flat, black blemish with irregular borders that may turn shades of red, blue, or white. It can develop from an existing mole or may appear where no mole existed. A changing or growing mole or a new mole should be checked promptly by a physician. Melanoma can spread to other organs, most commonly the lungs and liver. Melanoma detected early (thin lesions) has an excellent chance of being cured, whereas melanoma detected late (thick lesions) has a higher tendency to spread and cause death. A person who has had melanoma has a five to nine times greater risk of developing another melanoma.

In this country, the lifetime probability of developing melanoma is currently 1 in 100. If current trends continue, by the year 2000 the lifetime risk will climb to 1 in 75. Mortality rates from melanoma are also increasing.

SKIN: The Package You're In



Did You Know?

- Though tough and very complex, skin is really "paper" thin – varying from 1/25 to 1/8 of an inch deep!
- It only takes about an ounce of sunscreen to protect exposed skin from the sun.

Modified from the American Academy of Dermatology

Who Is at Risk?

Skin cancer is more common among people with lightly pigmented skin. People who are sensitive to the sun (those who easily burn and do not tan easily) have a greater risk for skin cancer because they are more likely to have acute sunburns when exposed to ultraviolet radiation.

Exposure to sunlight can be harmful, particularly if it results in sunburn. Current data suggest that sunlight exposure accumulated over a prolonged period influences the development of nonmelanoma skin cancer. Episodic, relatively infrequent exposure to a large amount of sunlight sufficient to cause sunburn is believed to play a major role in the development of melanoma.

Whites are 10 times more likely than blacks to have skin cancer. The National Cancer Institute's Surveillance, Epidemiology, and End Results 1986–1990 data suggest that under the age of 40, women are more likely than men to have melanoma, whereas over the age of 40, men are more likely to develop melanoma.

Melanoma Risk Factors:

- adulthood
- blond or red hair
- blue eyes
- Caucasian race
- changed or persistently changing mole
- congenital mole
- fair complexion
- freckles
- immunosuppression
- inability to tan
- melanoma in first-degree relatives
- one or more large or irregularly pigmented lesions
- personal history of melanoma
- severe sunburns in childhood
- sun sensitivity

Skin Phototypes

Skin Phototype	Skin Color in Unexposed Area	Tanning History
never tans/ always burns	pale or milky white; alabaster	develops red sunburn; painful swelling; skin peels
sometimes tans/ usually burns	very light brown; sometimes freckles	usually burns; pinkish or red coloring appears; can gradually develop light-brown tan
usually tans/ sometimes burns	light tan, brown, or olive; distinctly pigmented	rarely burns; shows moderately rapid tanning response
always tans/ rarely burns	brown, dark brown, or black	rarely burns; shows very rapid tanning response

Courtesy of the U.S. Environmental Protection Agency

Prevention

Death and morbidity from skin cancer can be reduced by changing modifiable risk factors regarding sun exposure.

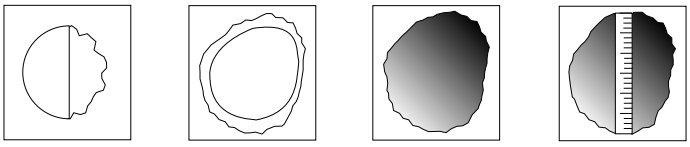
Prevention education is as important for children as it is for adults, because sunburns in childhood significantly increase the risk of developing skin cancer later in life. Sun exposure during childhood (up to 18 years old) is estimated to account for almost 80 percent of one's lifetime sun exposure, so children have the greatest potential to benefit from sun protection. Healthy behavior patterns established in early childhood often persist throughout life. Educating parents and caregivers will help shape healthy attitudes and behaviors regarding activities in the sun.

Parents and caregivers are in a unique position to influence children's health values. Parents, health care providers, schools, and community organizations can develop and provide educational strategies that reinforce protection from the sun (for example, altering time of outdoor activities or using shade while outdoors) and change attitudes about exposure to the sun.

The American Academy of Dermatology encourages skin examination, with the assistance of a family member, for the early detection of melanoma. One strategy for assessing pigmented lesions is the ABCD approach.

The ABCD's of Skin Cancer

Consult a dermatologist immediately if any of your moles or pigmented spots exhibit:



A – Asymmetry | B – Border irregular | C – Color varied from one area to another | D – Diameter larger than 6 mm

Courtesy of the American Academy of Dermatology

CDC Program Activities

National Skin Cancer Prevention Education Program

In its third year, CDC continues to develop partnerships and conduct activities that have supported the growth of the National Skin Cancer Prevention Education Program with FY 1996 appropriations of $1.8 million. Highlights include the following:

- A joint initiative with the American Academy of Dermatology (AAD) to enhance skin cancer prevention awareness during May National Melanoma/Skin Cancer Detection and Prevention Month, thus issuing a national call to action to strengthen efforts to prevent skin cancer.
- Convening national conferences with AAD that provide direction and input from experts in health, media, industry, and education to set an agenda for sun protection education for young children and their parents and caregivers.
- Developing messages aimed at reaching parents and caregivers of children regarding the health risks of the sun and action steps that can be taken toward protecting children from these ill effects.

Through funding from CDC, five state health agencies are conducting various prevention education activities:

* Arizona is reaching parents, caregivers, and daycare staff by advocating for sun protection policies, education, and training.
* California is reaching parents, caregivers, and child care center staff by developing an educational and training module, as well as accompanying materials and activities.
* Georgia is reaching coaches, team sponsors and leaders, day camp instructors, and other outdoor recreational staff by improving knowledge and personal practices regarding sun protection.
* Hawaii is reaching parents and recreational staff through the Summer Fun programs by training staff, providing environmental protec-

tion, developing sun safety policies, and developing interactive educational and behavioral activities.

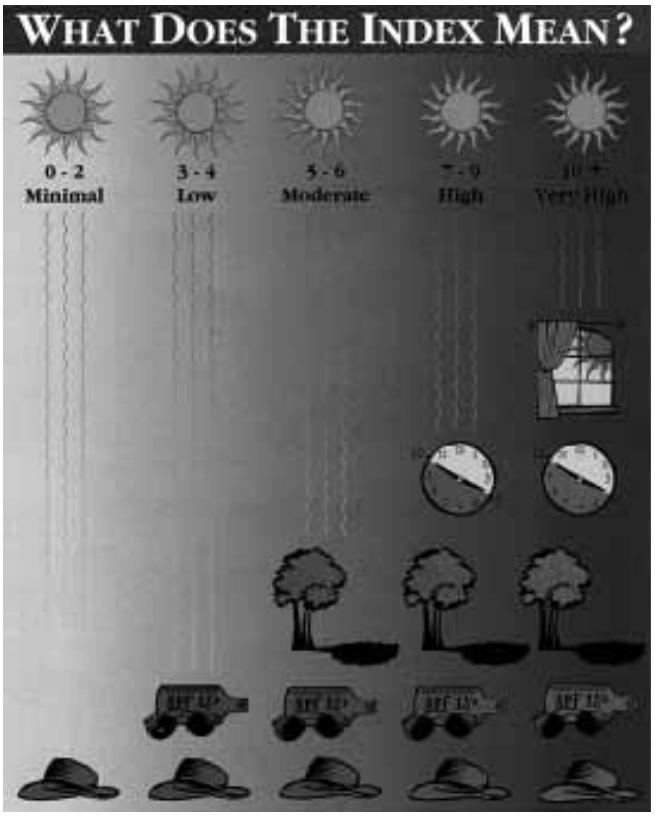
* Massachusetts is reaching parents and caregivers in hospitals, in elementary schools, and throughout the community by developing education programs, materials, and activities.

The five states implement these strategies in collaboration with community advisory boards, elementary school education departments, local and county health departments, parent groups, day care centers, voluntary organizations, university medical schools, cancer research institutes, dermatologists, and the American Cancer Society.

Other Collaborative Efforts and Activities

Besides these five state programs, CDC is promoting skin cancer prevention education activities through partnerships with a variety of professional associations:

- Through a cooperative agreement with the University of Alabama at Birmingham Prevention Center, CDC experts in cancer prevention and in school health education are developing comprehensive school health guidelines for skin cancer prevention. The guidelines will address student, parent, and teacher education; environmental protection policy development; and community awareness, especially among outdoor recreation establishments.
- To enhance and expand communication efforts aimed at the public, CDC will convene a workgroup of Federal agencies and of professional, national, voluntary, and consumer organization partners to provide direction and to participate in the further development of the National Skin Cancer Prevention Education Program. The workgroup will emphasize skin cancer protection efforts for children during National Melanoma/Skin Cancer Detection and Prevention Month (May).
- To develop further public information messages on skin cancer issues, CDC is working in partnership with the U.S. Environmental Protection Agency and other groups. The method used to disseminate these messages is the ultraviolet radiation index developed by the National Weather Service. This measure predicts the intensity of the sun's ultravio-



Courtesy of the U.S. Environmental Protection Agency, Be Sun Wise

let radiation on any given day at noon (see "What Does the Index Mean?" graphic).

- To develop or refine and evaluate a nurse curriculum, CDC funds two professional education activities, one at the University of Texas (UT) Health Science Center at Houston and a second at the University of North Carolina (UNC) at Chapel Hill. The UT program, an education project for public health nurses, provides didactic and clinical instruction related to skin cancer prevention and early detection. UNC developed and conducted a 4-hour continuing education teleconference program for public health nurses to increase their knowledge of skin cancer prevention and early detection.

Lastly, CDC has set out to learn more about and from successful programs in other countries, such as the SunSmart Program in Victoria, Australia. Linkages have already been established, and collaborative work begun, in Australia and Canada. International activities will continue to be an important part of the expansion and technical integrity of the National Skin Cancer Prevention Education Program.

"Melanoma writes its message in the skin with its own ink, and it is there for all to see. Unfortunately, some see but do not comprehend."

Neville Davis, MD, Modern Concepts of Melanoma and Its Management. Annals of Plastic Surgery 1:628, 1979

**For more information, please contact the Centers for Disease Control and Prevention,
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